

### Abstract of the Disclosure

A solid electrolytic capacitor with improved ESR before and after mounting on a circuit board is obtained by forming a cathode on a dielectric layer using a conductive polymer, especially an intrinsically conductive polymer. The polymer is then coated with graphitized carbon by dipping in a suspension thereof. After drying, the carbon is infused and coated at least once with a second conductive polymer layer before a conductive paint such as “dipping silver” is applied and the capacitor encapsulated by a transfer molding process. The application of a second conductive polymer layer improves the ESR by filling voids in the carbon layer and improves adhesion of the carbon.